REMARKS

Claims 1 – 35 are pending in the application. Claims 1, 14, and 28 are currently amended. Claims 36-41 are added.

Claim Rejections – 35 U.S.C 102

In this section of the official action, Claims 1-5, 13-14, and 16-20 were rejected under 35 U.S.C 102(b) as being anticipated by US Patent No. 6,549,179, to Youngquist.

The Examiner further rejected claims 28 under 35 U.S.C 102(b) as being anticipated by US Patent No. 6,482,664, to Lee et al.

Favorable reconsideration of this rejection in view of the above amendments and the following explanations is respectfully requested.

The present application describes a thin and flexible display device which is suitable for use in smart cards and like technologies.

The present invention, introduces the idea of independently controllable pixels which include disassociated dots of light emitting diode (LED) material.

The present invention further introduces the idea of coating one or more groups of dots of the LED material with a thin layer of light diffusing material, so that light emitted from the group of dots of LED may be displayed as a line.

The term light diffusing material is a reasonable generalization of the epoxy resin material used for coating the LED dots, as taught by the present invention.

By coating the group of dots with the thin layer, there is avoided the need to use a parallel connection of many LEDs densely arranges in lines, to display letters, digits, etc.

That is to say, by coating the group of dots with the thin layer, light emitted from a relatively small number of dots *or even a single dot* may be stretched and displayed as a line.

US Patent No. 6,549,179, to Youngquist, as described in the summary of invention section, utilizes a discovery that one can use substantially less than 0.010 inch excess solder pad dimensions placed with conventional surface mounting machinery (with appropriate cautionary steps being taken to prevent undesired solder flow through solder pad connection vias) to obtain relatively dense two-dimensional visual display of light-emitting diodes surface mounted on a printed circuit board.

With Youngquist, each diode provides a dot of output light when activated and the diodes can be disposed in relatively densely packed two-dimensional row and column arrays.

US Patent No. 6,482,664, to Lee et al, as described in the summary of invention section, provides a method for manufacturing white LEDs.

The method involves the steps of mixing a fluorescent dye with molding compound powder such as resin powder, compressing the mixture thereby producing a molding compound compact. The method also includes transfer-molding the molding compound compact on a blue LED chip, thereby being capable of forming a white LED serving to convert blue light emitted from the blue LED chip into white light. As a result, white light is omitted, while eliminating the potting process used in conventional cases, thereby allowing the white LED to have a slim structure suitable for back illumination for LCDs and other displays used in electronic products

Claim 1, as currently amended, defines a pixel-based electronic display comprising a plurality of *independently controllable* pixels, wherein the independently controllable

pixels respectively comprise a plurality of *disassociated* dots of light emitting diode material.

As described hereinabove and defined by claim 1, the present invention teaches the novel and inventive idea of using *independently controllable* pixels, wherein the independently controllable pixels comprise a plurality of *disassociated* dots of light emitting diode material.

Youngquist describes densely arranging LEDs in two-dimensional row and column arrays, and controlling the LEDs together to present digits, letters, etc.

For example, Youngquist describes on column 4, line 44: " As can be seen in FIG. 2 (and in the enlargement of FIG. 3), the LEDs 20 of successive rows R1, R2, R3, R4, etc. are orthogonally disposed with respect to one another so as to define a pattern commonly referred to in the brick-laying art as a "herringbone" pattern. Similarly, it will be noted that successive columns C1, C2, C3 . . . are also made up of LEDs that are disposed orthogonally to one another in the herringbone pattern".

However, Youngquist falls short of disclosing, or even hinting at the idea of using *independently controllable* pixels, wherein the independently controllable pixels comprise a plurality of *disassociated* dots of light emitting diode material, as taught by the present invention, and defined by claim 1.

Lee et al disclose a method for manufacturing white light emitted diodes (white LEDs).

However Lee et al also fall short of disclosing, or even hinting at the idea of using *independently controllable* pixels, wherein the independently controllable pixels comprise a plurality of *disassociated* dots of light emitting diode material, as taught by the present invention, and defined by claim 1.

It is thus respectfully believed that claim 1 is both novel and inventive over the prior art, and maintained that claim 1 is allowable.

Claim 14, as currently amended, defines a thin computing device comprising electronic processing functionality and a display screen, wherein the display screen is a pixel-based display screen comprising a plurality of *indepnedently controllable* pixels, wherein the pixels respectively comprise *a plurality of disassociated* dots of light emitting diode material.

As described hereinabove, neither Youngquist nor Lee describe or even hint at the idea of using *independently controllable* pixels, wherein the independently controllable pixels comprise a plurality of *disassociated* dots of light emitting diode material, as taught by the present invention, and defined by claim 14.

It is thus respectfully believed that claim 14 is both novel and inventive over the prior art, and maintained that claim 14 is allowable.

Claim 28, as currently amended, defines a method of manufacturing a flexible low power display comprising: providing *independently controllable* pixels, wherein the independently controllable pixels respectively comprise a plurality of *disassociated* dots of light emitting diode (LED) material, bonding the dots to a PCB having a backing material, and removing the backing.

As described hereinabove, neither Youngquist nor Lee describe or even hint at the idea of using *independently controllable* pixels, wherein the independently controllable pixels comprise a plurality of *disassociated* dots of light emitting diode material, as taught by the present invention, and defined by claim 28.

It is thus respectfully believed that claim 28 is both novel and inventive over the prior art, and maintained that claim 28 is allowable.

All dependent claims are believed to be allowable as being dependent upon an allowable main claim.

All of the matters raised by the Examiner have been dealt with and are believed to have been overcome.

In view of the foregoing, it is respectfully submitted that all the claims now pending in the application are allowable over the cited reference. An early Notice of Allowance is therefore respectfully requested.

Respectfully submitted,

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Date: January 16, 2007

Enclosed:
Petition for Extension (2 Months); and
Additional Claim Transmittal.